

## Association for Information Systems AIS Electronic Library (AISeL)

---

ACIS 2011 Proceedings

Australasian (ACIS)

---

2011

# Combating the IS Enrolment Crisis in Australia: The Design and the Effectiveness of a Five-Minute IS Promotional Talk

Zhong Zheng

*Australian National University, zhong.zheng@anu.edu.au*

Follow this and additional works at: <http://aisel.aisnet.org/acis2011>

---

### Recommended Citation

Zheng, Zhong, "Combating the IS Enrolment Crisis in Australia: The Design and the Effectiveness of a Five-Minute IS Promotional Talk" (2011). *ACIS 2011 Proceedings*. 60.

<http://aisel.aisnet.org/acis2011/60>

This material is brought to you by the Australasian (ACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ACIS 2011 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

## Combating the IS Enrolment Crisis in Australia: The Design and the Effectiveness of a Five-Minute IS Promotional Talk

Zhong Zheng  
School of Accounting and Business Information Systems  
Australian National University  
Canberra, Australia  
Email: [zhong.zheng@anu.edu.au](mailto:zhong.zheng@anu.edu.au)

### Abstract

*This paper reports on the design and the effectiveness of a five-minute IS promotional talk that is used in one of the leading Australian universities to promote IS courses to existing accounting students. In particular, this paper explains in details the elements that were employed by the promotional talk to stimulate accounting students' interest in IS courses and shaping their perception towards the IS discipline. The paper then develops an evaluation mode and a survey questionnaire, and uses structural equation modelling to evaluate the effectiveness of the promotional talk. Evaluation results show that, by providing useful and sufficient information regarding available IS courses and by providing justified reasons to take IS courses, the five-minute IS promotional talk is indeed effective in promoting accounting students' interest in IS courses and their perception of the relevance of IS courses to their current degree.*

### Keywords

Information Systems Enrolment Crisis, Information Systems Marketing, Australian University.

### INTRODUCTION

The enrolments in Information Systems (IS) related programs have fallen sharply in the last decade (Becker et al. 2006; Choudhury et al. 2010; George et al. 2005; Granger et al. 2007; Looney and Akbulut 2007). While the decline in enrolments of IS-related programs is mainly reported by researchers in the North America, a similar situation of declining enrolment number can also be observed in Australia. Overall, although the demand for ICT labour is increasing in Australia, the local supply of ICT labour continues to decline (DIIRD 2010). Nationally, statistics from the Department of Education, Employment and Workplace Relations (DEEWR) of Australia show that the total number of ICT enrolments in Australia suffers a sharp decline by 38% over the last decade, from 79,085 in 2002 to 50,672 in 2009 (Figure 1). Locally, the IS department of one Australian university also observed that its total IS enrolment number halved in 2010, when comparing to the enrolment figure in 2003. These facts suggest that the IS enrolment crisis also exists in Australia.

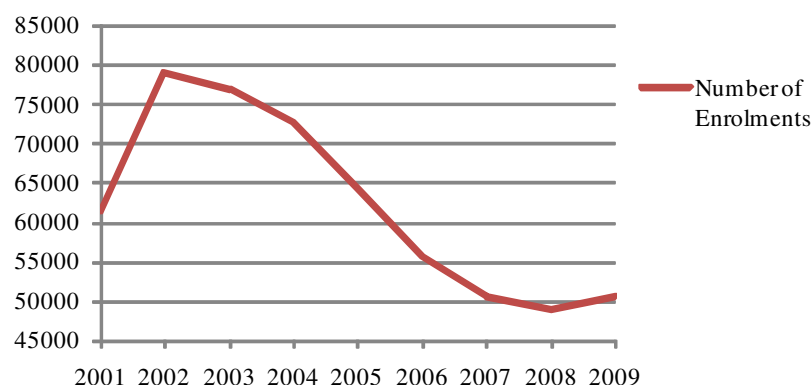


Figure 1: Number of Enrolments of ICT Students, 2001-2009 (2010 data not yet available at the time of investigation)

Source: Higher Education Statistics (Student), DEEWR

The declining ICT enrolment numbers in Australia poses challenges to universities and especially to their IS departments. While their counterparts in North America have taken the initiatives to combat the IS enrolment crisis (Becker et al. 2006; Choudhury et al. 2010; Looney and Akbulut 2007), IS departments in Australian universities have also started to investigate possible reasons behind the fall in IS enrolment (Ho et al. 2008), and some IS departments have even started on implementing strategies for boosting IS enrolment. In particular, the

IS department at the Australian National University has devised a few marketing initiatives for maintaining and increasing enrolments in IS programs and courses. One of these marketing initiatives is an internal marketing scheme that aims at marketing non-compulsory IS courses to existing undergraduate accounting students in the university. This paper reports on the first part of the internal IS marketing scheme that concerns a five-minute IS promotional talk that is delivered in lectures and tutorials to promote IS courses.

The main purpose of this paper is to share an important part of the experience of dealing with IS enrolment crisis at the undergraduate level at an Australian university with the rest of the IS community by showing how a carefully designed and structured five-minute IS promotional talk can promote effectively accounting students' interest in taking IS courses and their understanding of the relevance of IS courses to their current degree. In particular, this paper achieves its main purpose by addressing the following three questions: (1) What makes a promotional talk effective in promoting IS courses to accounting students? (2) Does the IS promotional talk promote accounting students' interest in IS courses? And (3) Does the IS promotional talk promote accounting student's understanding of the relevance of IS courses to their current degree? While sharing this experience is important when there is few documented internal IS marketing efforts in academic publications concerning cases in Australia, this paper also hopes to stimulate the discussion of effective approaches that can be pursued to increase future IS enrolments so that more effective means of boosting IS enrolment can be shared and learned. After all, such a discussion is beneficial and of interest to every IS department, both locally in Australia and internationally, that is keen to combat the IS enrolment crisis.

The rest of the paper is arranged as follows. The next section presents a brief literature review of the extant IS literature on IS enrolment crisis. The third section explains the design of the five-minute IS promotional talk, while the fourth section introduces the method for evaluating the effectiveness of the promotional talk. The fifth section discusses details of data analysis and results, and the paper concludes with a discussion of findings.

## **BRIEF LITERATURE REVIEW**

### **Pioneer Initiatives of Combating the IS Enrolment Crisis and the Driving Reasons**

IS marketing initiatives targeting both potential university students (i.e. high school or college students) and existing university students have been carried out and reported by researchers in North America. For example, Choudhury et al. (2010) reported on an IT Careers Camp that was specifically designed to convince high school participants that IS/IT jobs are interesting and creative and the demand in the field is still strong. Both qualitative and quantitative evaluations suggest that the camp was a success in changing student's perceptions about the nature of IS/IT jobs and market positively (Choudhury et al. 2010). Looney and Akbulut (2007) also presented empirical evidence showing that assigning effective teachers to introductory IS courses in universities can promote the self-efficacy, outcome expectations, and interest in the IS field, all of which contribute to enrolment in IS-related academic programs in turn.

One major reason driving these marketing initiatives is students' misperception and lack of understanding of the nature of the IS discipline. For some less technology-oriented students, they choose not to take an IS major because they consider IS too difficult or too technical (Choudhury et al. 2010; Granger et al. 2007; Lomerson and Pollacia 2006). These students often equate IS to IT or engineering because many high school computing classes emphasize the technical part of IS/IT, such as programming (Lomerson and Pollacia 2006). In addition, while many students do not understand what IS courses can offer and what they can learn from IS courses, some other students think that learning IS knowledge while in university is unimportant because the IS knowledge they obtained may become obsolete very soon due to rapid technology evolution (Ho et al. 2008). Furthermore, an Australia state-level study showed that "the perceptions that working in ICT means sitting in front of a computer all day and that as a career ICT would be very boring" is a major hinderer to IS program intakes (DIIRD 2007, p.7). Therefore, such a misperception and lack of familiarity of the nature of the IS discipline deter students from choosing IS as their major (Carter 2006).

Acknowledging the fall in IS enrolment and the reasons behind the fall, the literature suggests four approaches to boost IS enrolments: the curriculum approach, the modification approach, the marketing approach, and the visibility approach (Lomerson and Pollacia 2006). Of the most interest to this study is the visibility approach. The visibility approach aims at promoting the visibility of the IS discipline to existing students by running series of promotional activities (Lomerson and Pollacia 2006). In this paper, the visibility approach is re-termed as the "internal marketing approach" to reflect a broader inclusion of marketing activities and goals, because the approach does more than promoting the visibility of the IS discipline in the university.

The internal marketing approach is effective only if the needs of the students are known. It has been reported that, when selecting a course, students consider the usefulness of the course to their long-term career and job-seeking first, while the relevance of the course to accounting courses and the interestingness of the course second (Ho et al. 2008). Moreover, although students also weigh the relevance of IS knowledge and IS course image when reviewing IS courses, many of them are not interested in doing IS courses as electives in the end because they

think they can learn IS knowledge in work, and many of them have a poor impression of IS courses (Ho et al. 2008). These factors must be taken into consideration at all times when the internal marketing approach is designed and undertaken.

## DESIGN OF THE IS PROMOTIONAL TALK

Building on the findings in the extant IS literature regarding the IS enrolment crisis and the reasons behind the crisis, the IS department at the Australian National University decided to design a short promotional talk that aims to promote the IS discipline to existing students in the university. Moreover, because the IS department was in the same school as the Accounting department and the IS discipline and the accounting discipline were closely associated, the IS department decided that the promotional talk should target existing accounting students in the university first.

### Content of the IS Promotional Talk

The literature review provides important information that guides the design of the IS promotional talk. In particular, the content of the IS promotional talk should be structured to meet the following criteria. First, the talk should explain clearly the nature of the IS discipline so that students' misperception towards the IS discipline can be corrected. To satisfy this criterion, the promotional talk included a clear explanation of what information systems is and what information systems is not by contrasting IS to IT and Computer Science (CS), emphasizing that the IS discipline is more business-oriented and less technically-oriented, and highlighting the practicality of the discipline in business environments.

Second, the talk should clarify the importance of IS knowledge to students' job-seeking and long-term career. To this end, the promotional talk explicated the need of IS knowledge in competing in job-seeking, advancing accounting careers, and progressing to managerial positions. Additionally, the talk presented a latest example of how one accounting student was offered a position by KPMG Internal Audit, Risk & Control Services because of the student's successful demonstration of relevant IS knowledge.

Third, the talk should show that IS knowledge is relevant to the accounting major. While the talk touched on this criterion during the explanation of the need of IS knowledge, it demonstrated the Australian Government's position towards IS knowledge in the accounting major by referring to *Section 3.2 Threshold Learning Outcomes for Accounting* in the *Academic Standards Statement for Accounting* (ALTC 2010). The section stated specifically that "Bachelor graduates in Accounting will be able to integrate theoretical and technical accounting knowledge which includes a selection of auditing and assurance, finance, economics, quantitative methods, *information systems*, commercial law, corporation law and taxation law" (ALTC 2010; italic emphasis are added). It is believed that presenting the Australian Government's position towards IS knowledge in the accounting major will strengthen the credibility of the promotional talk to accounting students.

Fourth, the talk should give students a good idea of what IS courses are available and what they can learn from these courses. The promotional talk did so by listing all available IS courses and introduced each of them to the students. During introduction, the talk not only described in general the content, learning outcomes, and context of application of every course, but also specified the link between some of the courses and the professional level Certified Practising Accountants (CPA) program and the Chartered Accountants (CA) program.

Finally, the talk should list relevant information sources of IS courses to enable interested students to look for additional information. Listing further information sources of IS courses is very important because the information that the promotional talk can deliver in five minutes is very limited. To provide additional sources of information, the promotional talk listed the address of the university website that contains a list of available IS courses and links to their information page. Moreover, the promotional talk listed the Google keywords that can be used to search for information regarding IS courses in the university. The promotional talk also listed the presenter's email address, telephone number, and office location and encouraged interested students to contact the presenter in case of inquiry.

### Delivery of the IS Promotional Talk

There are two approaches to deliver the IS promotional talk. The first approach is delivering through dedicated information session. In this approach, one or more information sessions regarding IS courses can be held and students can join the sessions voluntarily. While this approach is non-intrusive, it may have an insufficient level of student participation because accounting students are more interested in Finance, Economics, and Management courses than IS courses (Ho et al. 2008). However, this approach may achieve a wider reach because interested students from other disciplines, such as Management and Finance, are not excluded. Apart from the issue of student participation and reach, another issue associated with this approach is that it requires extra advertising efforts to promote the awareness of the information sessions, which may or may not be preferable due to the need for additional financial and human resources.

The second approach is delivering the promotional talk in selected lectures and tutorials. One major benefit of this approach is that student reach can be controlled and student participation can be guaranteed. However there is a balance between the length and the number of presentation because the time and energy of the presenter are limited and the time that can be devoted to non-teaching activities in lectures and tutorials are also restricted. If the presentation is too long then it will erode valuable teaching time, and if the number of presentation is too few then the student reach will be insufficient. Consequently, the length of the presentation depends on the agreement between lecturers/tutors and the presenter whereas the number of presentations largely depends on the presenter's availability and energy.

Apart from the approach of delivering the IS promotional talk, the way of presenting and timing of presentation delivery need to be considered. The way of presenting the promotional talk can affect the effectiveness of the IS promotional talk. A presenter whose presentations are passionate, engaging, and contagiously enthusiastic is more effective in attracting students' attention and getting the message across. The timing of presentation delivery can also affect the effectiveness of the talk. If the talk is delivered at the beginning of a semester, it is possible to see an immediate increase in IS enrolment in that semester given that interested students decide to take one or more IS courses. However, since most students pick their courses for a semester before the semester starts, it is less likely that they will switch from one predetermined course to a new one just because of the promotional talk. Moreover, leveraging on the presenter's personal charisma can become less effective because many of the target students may be new to the university. Delivering the talk at the end of the semester gives students time to digest the content of the talk and time to explore IS courses. It also has better leverage on the presenter's personal charisma since the presenter is then more known to students through teaching in the semester.

Considering all the factors mentioned above, the promotional talk took the second approach and it was delivered in lectures and tutorials. Because the IS marketing scheme mainly targets first- and second-year accounting students who still have available electives, lectures and tutorials of first- and second-year accounting courses were selected. In particular, the talk was delivered at the end of a semester to four first- and second-year accounting courses at the beginning of their last lecture and it was also delivered at the end of four normal-sized tutorials and one special tutorial (around 70 students) that were taught by the presenter in the last week of the teaching period. Of these tutorials, three were from a compulsory first-year accounting course and four were from a second-year compulsory IS course for accounting students. The talk was about five minutes long and it was delivered by one member of the IS department. The member was chosen to develop and deliver the promotional talk because of his sound presentation style, good relationship with students, and accounting knowledge.

## EVALUATION METHOD

The evaluation of the IS promotional talk helps to identify potential improvements to the talk and to confirm that the talk promotes accounting students' interest in IS courses and their understanding of the relevance of IS courses to their current degree. Specifically, the survey method was used to collect data for testing the evaluation model (Figure 2) using structural equation modelling (SEM).

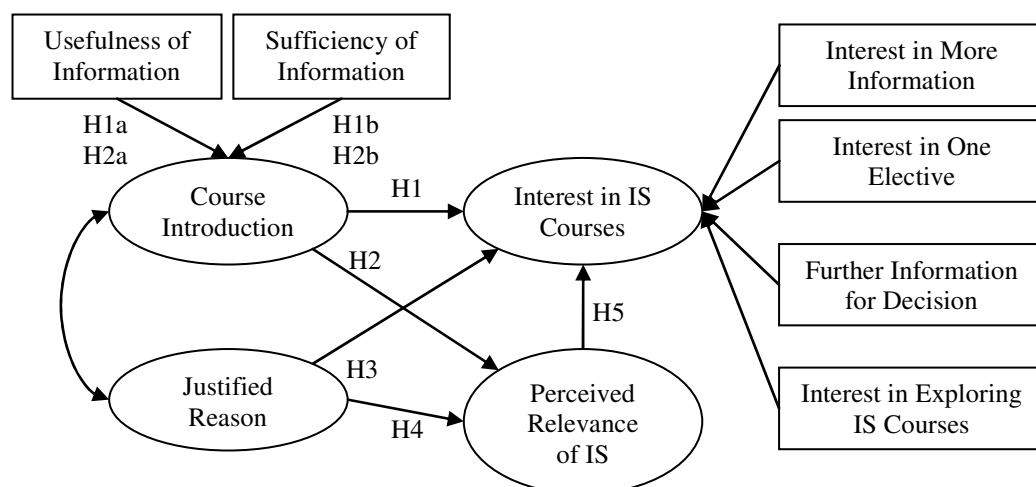


Figure 2: The Evaluation Model

### **Evaluation Model Development, Hypotheses Development, and Construct Operationalization**

In this study, we were interested in learning the factors that made the promotional talk effective in promoting IS courses to accounting students, whether the promotional talk promoted accounting students' interest in IS courses, and whether the promotional talk improved accounting student's understanding of the relevance of IS courses to their current degree. By introducing IS courses to students in the promotional talk, we expected promotion in students' interest in IS courses and improvement in students' understanding in the relevance of IS courses. Moreover, by providing justified reasons to explain the need to take IS courses, we expected promotion in both students' interest in IS courses and their understanding of the relevance of IS courses. In addition, we proposed that students' understanding of the relevance of IS courses could contribute positively to their interest in IS courses. As a result, we formulated the following hypotheses:

- H1: Introduction to IS courses presented at the talk will promote accounting students' interest in IS courses.*
- H2: Introduction to IS courses presented at the talk will promote accounting students' perception of the relevance of IS courses to their current degree.*
- H3: Justified reasons for doing IS courses presented at the talk will promote accounting students' interest in IS courses.*
- H4: Justified reasons for doing IS courses presented at the talk will promote accounting students' perception of the relevance of IS courses to their current degree.*
- H5: Accounting students' perception of the relevance of IS courses to their current degree will contribute positively to their interest in IS courses.*

In the evaluation model, the course introduction construct evaluates the quality of course information provided by the promotional talk. Course introduction is a formative construct formed from two subconstructs: the usefulness of information and the sufficiency of information. The construct was operationalized in this way because the usefulness of information does not necessarily correlate with the sufficiency of information. For example, the talk can provide abundant but useless information regarding IS courses.

The usefulness of information subconstruct was operationalized by asking students to indicate on a five-point Likert scale the extent to which the talk has provided useful information regarding IS courses. This subconstruct evaluated the quality of course information provided by the promotional talk. The sufficiency of information subconstruct was operationalized by asking students to indicate on a five-point Likert scale the extent to which the talk has provided sufficient information regarding IS courses. This subconstruct measured whether enough information has been provided in the promotional talk. Hence, two corollaries to H1 and two corollaries to H2 would be:

- H1a: Usefulness of information regarding IS courses presented at the talk will promote accounting students' interest in IS courses.*
- H1b: Sufficiency of information regarding IS courses presented at the talk will promote accounting students' interest in IS courses.*
- H2a: Usefulness of information regarding IS courses presented at the talk will promote accounting students' perception of the relevance of IS courses to their current degree.*
- H2b: Sufficiency of information regarding IS courses presented at the talk will promote accounting students' perception of the relevance of IS courses to their current degree.*

The interest in IS courses construct measures students' interest in IS courses after the talk. The construct is a formative construct formed from four subconstructs: interest in more information, interest in one elective, further information for decision, and interest in exploring IS courses. The rationale for modelling the construct as formative is that the four subconstructs do not necessarily correlate with one another. For example, while a student is interested in more information regarding IS courses, the student may not be interested in taking one IS course as elective.

The interest in more information subconstruct was operationalized by asking students to indicate the extent to which the talk had interested them in finding out more information regarding IS courses, while the interest in one elective subconstruct was operationalized by asking students to rate the extent to which the talk had interested them in doing at least one non-compulsory IS course. Similarly, the further information for decision subconstruct was operationalized by asking students to suggest the extent to which they need further information to decide whether to take a non-compulsory IS course, whereas the interest in exploring IS courses subconstruct was operationalized by asking students to specify the extent to which they are interested in exploring IS courses because of the talk. All subconstructs were measured on five-point Likert scales.

The justified reason construct was operationalized by using a single measure that asked students to rate the extent to which the talk has provided justified reasons for doing IS courses. Likewise, the relevance of IS courses construct was operationalized by using a single measure that asked student to indicate the extent to which IS courses are relevant to their current degree. A five-point Likert scale was used to gauge each of the two measures.

### The Evaluation Survey

A self-administered paper-based survey was conducted at the Australian National University in the first semester in 2011. The questionnaire contained nine questions. While the first eight questions measured the four constructs, the last question asked participating students to choose one or more pre-defined answers regarding the most likely reasons that may hinder them from taking IS courses as electives. The last question also allowed students to specify their own answer if the “Other” option was chosen. Questionnaires were distributed to the students before each promotional talk in tutorials and they were collected at the end of each tutorial. Questionnaires were not distributed in lectures because of possible disturbance to teaching.

Exactly 100 of the 139 questionnaires distributed were returned. The response rate is 71.9 percent and it is considered sufficiently high. Further screening of the returned questionnaires showed that all questionnaires were usable because none of them was incomplete or was completed randomly.

## DATA ANALAYSIS AND RESULTS

### Descriptive Statistics

Table 1 summarizes the descriptive statistics of questions asked in the survey (see Appendix 2 for details of exact items). According to Table 1, students agreed that the five-minute IS promotional talk had provided them with useful and sufficient information regarding IS courses in the university. Students also agreed that they were interested by the talk to find out more information for IS courses offered by the university. In addition, students tended to agree that they were interested in taking at least one non-compulsory IS course, but they need further information to aid their decision. This means that the five-minute promotional talk conveyed only limited information and it makes leaving contact information as well as extra information sources at the end of the talk meaningful and necessary. In terms of the effectiveness of the IS promotional talk, students agreed that the talk had provided justified reason for doing IS courses and they agreed that IS courses are relevant to their current degree.

Table 1. Descriptive Statistics

	Mean	S.D
Usefulness of information	4.61	0.67
Sufficiency of information	4.47	0.70
Interest in more information	4.03	0.93
Interest in one elective	3.87	1.15
Further information for decision	3.83	1.09
Interest in Exploring IS courses	3.86	1.11
Justified reason	4.47	0.73
Relevance of IS courses	4.17	1.14

Note: Questions were measured on a five-point Likert scale (1=Disagree, 2=Slightly Disagree, 3=Neither Agree nor Disagree, 4=Slightly Agree, and 5=Agree).

### Confirmatory Factor Analysis and Reliability

Before SEM is conducted to test the evaluation model, a confirmatory factor analysis (CFA) using the principle components method was conducted to determine whether the two-construct structure of the course introduction construct and the interest in IS courses construct persisted and whether the structure was represented by the same group of items when items' grouping and ordering were no longer maintained. The CFA was conducted in PASW Statistics 18 (formerly known as SPSS).

Initial statistical examination of the dataset showed that most correlations in the correlation matrix were significant by exceeding the required level of .3 (see Table 4 in Appendix 1) (Coakes 2005). Moreover, the

Kaiser-Meyer-Olkin measure of sampling adequacy was .732, and the Bartlett's test of sphericity was large ( $\chi^2=318.488$ ,  $df=15$ ) and significant at the .01 level ( $p=.000$ ), indicating that the dataset was suitable for factoring (Coakes 2005).

To obtain a clearer picture of factor loading, the factor analysis was performed with orthogonal (varimax) rotation and factors were defined by selecting the highest loading in each variable row (Lattin et al. 2003). The reason for choosing orthogonal rotation over oblique rotation was that correlations among constructs, namely the course introduction construct and the interest in IS courses construct, were expected to be insignificant (Loehlin 1992; Rummel 1970). The rotated component matrix (Table 2) suggests that a two-factor structure was evident and 77.9% of the variance can be explained by the two-factor structure (Table 3 in Appendix 1). Furthermore, while the sufficiency of information item and the usefulness of information item loaded highly on the same component, the rest of the items loaded highly on the other component. This result was consistent with our expectation. Therefore, it is evident that course introduction and interest in IS courses are two separate constructs, each measured by their constituting items.

Table 2. Rotated Component Matrix

	Component 1	Component 2
Interest in Exploring IS courses	.897	
Interest in more information	.815	
Interest in one elective	.796	
Further information for decision	.775	
Sufficiency of information		.941
Usefulness of information		.938

Furthermore, both the course introduction construct and the interest in IS courses construct exhibited high reliability because their Cronbach's alphas (.905 and .853 respectively) were greater than the required level of .8 (Nunnally 1978), and no removal of items would enhance the reliability measure. Consequently, the CFA confirms that the course introduction construct and the interest in IS courses construct are two separate constructs with good reliability.

### Evaluating the Model

Following confirmation of good psychometric properties in the constructs of the evaluation model, AMOS 18 was used to assess the evaluation model. The results indicated that the model was a good fit to data because all indices were better than their required level ( $\chi^2=18.6$ ,  $df=16$ ,  $p=.289$ ; RMSEA=.041; GFI=.956; CFI=.994) (Hair et al. 2009; Ho 2006; Kline 2005). Moreover, hypotheses were assessed by examining the significance level of each of the path coefficients in the tested model. It can be seen from Figure 3 that all hypotheses and their corollaries were supported, except H1, H1a, and H1b.

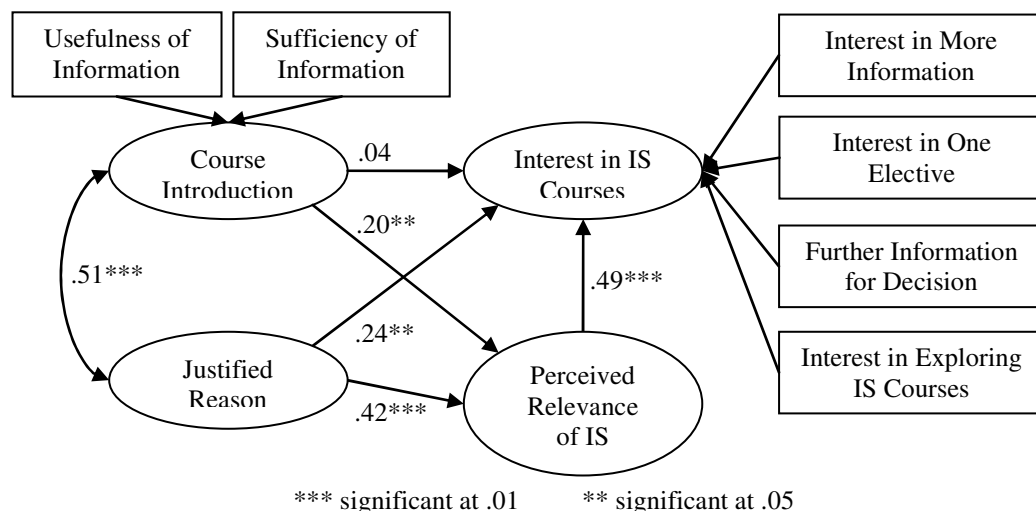




Figure 3: The Evaluated Model

## DISCUSSION OF FINDINGS

In the current study, we were interested in learning and deciding the factors that could make the IS promotional talk effective in raising students' interest in IS courses and making students understand the relevance of IS courses to their current degree. Evaluation of the structural model suggested that, because H1 was not supported, introduction of IS courses did not contribute directly to students' interest in IS courses. Additionally, since H1a and H1b were not supported, providing useful and sufficient information regarding IS courses during the promotional talk would not promote students' interest in IS courses directly.

There might be two reasons why H1, H1a, and H1b were not supported. First, due to the five-minute time constraint, each course was introduced in just a few sentences. While the amount of information may be sufficient for students to learn what a course is all about, it was insufficient to arouse students' interest because the interestingness of the courses had not been explained thoroughly. Second, the way of introducing available IS courses might be ineffective in promoting students' interest. This may have something to do with the way of presentation and the wording.

Because H2 was supported, this means that the introduction to IS courses presented at the promotional talk was effective in promoting accounting students' perception of relevance of IS courses to their current degree. This means that explaining how some of the IS courses are related to professional level CPA or CA programs and demonstrating the Australian government's position towards IS knowledge in the accounting major in the promotional talk contribute positively to student's understanding of the relevance of IS courses to their degree.

Furthermore, the support for H3 and H4 indicates that presenting justified reasons for doing IS courses during the talk has promoted both accounting students' interest in IS courses and their perception of the relevance of IS courses to their current degree. According to this finding, providing justified reasons for doing IS courses is more dominant than the introduction of IS courses in affecting accounting students' interest in IS courses and the perception of relevance. This suggests that the IS promotional talk has made forceful and persuasive arguments of doing IS courses.

Finally, the support for H5 implies that accounting students' perception of the relevance of IS courses to their current degree did contribute positively to their interest in IS courses. Because H2 was supported and the introduction to IS courses presented in the promotional talk influence students' perceived perception of relevance of IS courses positively, it can be say that the introduction of IS courses contribute to students' interest in IS courses indirectly.

In summary, the five-minute IS promotional talk is successful in terms of promoting accounting students' interest in taking IS courses and their understanding of the relevance of IS courses to their degree. However, it is worth noticing that the success of the promotional talk does not necessarily mean that there will be immediate increase in IS enrolment. In fact, although the promotional talk was successful in stimulating accounting students' interest in IS courses as well as shaping their perception towards IS courses, it could be very challenging to establish a link between the talk and the subsequent variation in IS enrolment number. Perhaps this is a longitudinal research effort that ensuing studies can take.

## CONCLUSION

This paper reports on a five-minute IS promotional talk conducted at the Australian National University and the evaluation against its effectiveness. It has been demonstrated that the carefully designed and structured five-minute IS promotional talk can indeed promote effectively accounting students' interest in taking IS courses and their understanding of the relevance of IS courses to their current degree. Moreover, details of the contents of the promotional talk were shown to be effective in promoting IS courses to accounting students.

After the IS promotional talk was delivered, the presenter received quite a few telephone and email inquiries from accounting students that were interested in taking at least one IS course in the coming semester. A few students even approached the presenter in person and discussed their needs of choosing an IS course with the presenter face-to-face.

Combating the IS enrolment crisis is not an easy task, and many efforts have to be spent before increases in the IS enrolments can be seen. However, all efforts are worthwhile if the declining trend of IS enrolment can be reversed. It is hoped that more and more future discussions of initiatives that aim to promote the IS discipline can be seen.

## REFERENCES

- ALTC. 2010. *Academic Standards Statement for Accounting*. Department of Education, Employment and Workplace Relations, Australian Government.
- Becker, J., Hassan, N., and Naumann, J.D. 2006. "Combating the Enrollment Downturn in IS/IT Programs," *AMCIS 2006 Proceedings*, Acapulco, Mexico, pp. 2288-2298.
- Carter, L. 2006. "Why Students with an Apparent Aptitude for Computer Science Don't Choose to Major in Computer Science," in: *SIGCSE '06*. Houston: pp. 27-31.
- Choudhury, V., Lopes, A.B., and Arthur, D. 2010. "IT Careers Camp: An Early Intervention Strategy to Increase IS Enrollments," *Information Systems Research* (21:1), pp 1-14.
- Coakes, S.J. 2005. *SPSS: Analysis without Anguish*. Milton, Queensland: John Wiley & Sons Australia, Ltd.
- DIIRD. 2007. *ICT Skills Research*. Melbourne: Department of Innovation, Industry and Regional Development, Victorian Government.
- DIIRD. 2010. *2010 ICT Skills Snapshot*. Melbourne: Department of Innovation, Industry and Regional Development, Victorian Government.
- George, J.F., Valacich, J.S., and Valor, J. 2005. "Does Information Systems Still Matter? Lessons for a Maturing Discipline," *Communications of the AIS* (16:1), pp 219-232.
- Granger, M.J., Dick, G., Jacobson, C.M., and Slyke, C.V. 2007. "Information Systems Enrollments: Challenges and Strategies," *Journal of Information Systems Education* (18:3), pp 303-311.
- Hair, J.F., Black, W.C., Babin, B.J., and Anderson, R.E. 2009. *Multivariate Data Analysis*, (7th ed.). Upper Saddle River, N.J.: Prentice Hall.
- Ho, R. 2006. *Handbook of Univariate and Multivariate Data Analysis and Interpretation with SPSS*. Boca Raton, FL: Chapman & Hall/CRC, Taylor & Francis Group, LLC.
- Ho, S.Y., Pan, G., and Ferguson, C. 2008. "The Information Systems-Accounting Nexus: Lessons from an Australian Institution," *Communications of the AIS* (22:1), pp 197-210.
- Kline, R.B. 2005. *Principles and Practice of Structural Equation Modeling*, (2nd ed.). New York: The Guilford Press.
- Lattin, J.M., Carroll, J.D., and Green, P.E. 2003. *Analyzing Multivariate Data*. Pacific Grove: Thomson Brooks/Cole.
- Loehlin, J.C. 1992. *Latent Variable Models: An Introduction to Factor, Path, and Structural Analysis*, (2nd ed.). Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Lomerson, W.L., and Pollacia, L.F. 2006. "Declining CIS Enrollment: An Examination of Pre-College Factors," *Information Systems Education Journal* (4:35), pp 1-13.
- Looney, C.A., and Akbulut, A.Y. 2007. "Combating the IS Enrollment Crisis: The Role of Effective Teachers in Introductory IS Courses," *Communications of the AIS* (19:1), pp 781-805.
- Nunnally, J.C. 1978. *Psychometric Theory*, (2nd ed.). New York: McGraw-Hill.
- Rummel, R.J. 1970. *Applied Factor Analysis*. Evanston: Northwestern University Press.

## APPENDIX 1: STATISTICS

Table 3. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Var.	Cum. %	Total	% of Var.	Cum. %	Total	% of Var.	Cum. %
1	3.235	53.916	53.916	3.235	53.916	53.916	2.746	45.774	45.774
2	1.441	24.019	77.935	1.441	24.019	77.935	1.930	32.162	77.935
3	.560	9.327	87.262						
4	.361	6.021	93.283						

5	.246	4.092	97.374
6	.158	2.626	100.000

Table 4. Correlation Matrix

		Q1	Q2	Q4	Q5	Q6	Q7
Correlation	Q1	1.000	.828	.347	.382	.130	.281
	Q2	.828	1.000	.351	.288	.131	.240
	Q4	.347	.351	1.000	.648	.484	.721
	Q5	.382	.288	.648	1.000	.448	.697
	Q6	.130	.131	.484	.448	1.000	.588
	Q7	.281	.240	.721	.697	.588	1.000
Significance (1-tailed)	Q1		.000	.000	.000	.098	.002
	Q2	.000		.000	.002	.096	.008
	Q4	.000	.000		.000	.000	.000
	Q5	.000	.002	.000		.000	.000
	Q6	.098	.096	.000	.000		.000
	Q7	.002	.008	.000	.000	.000	

Q1= Usefulness of information; Q2= Sufficiency of information; Q4= Interest in more information; Q5= Interest in one elective; Q6= Further information for decision; Q7= Interest in Exploring IS courses.

## APPENDIX 2: MEASUREMENT ITEMS FOR KEY VARIABLES

### Course Introduction Construct

Usefulness of information: The Talk provides useful information regarding INFS courses.

Sufficiency of information: The Talk provides sufficient information regarding INFS courses.

### Interest in IS Courses Construct

The Talk interests me in finding out more information regarding INFS courses.

The Talk interests me in doing at least one non-compulsory INFS course.

I need further information to decide whether to take a non-compulsory INFS course.

I am interested in exploring INFS courses because of the Talk.

### Justified Reason Construct

The Talk provides justified reasons for doing INFS courses.

### Relevance of IS courses Construct

I think INFS courses are relevant to my current degree.

## COPYRIGHT

Zhong Zheng © 2011. The authors assign to ACIS and educational and non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ACIS to publish this document in full in the Conference Papers and Proceedings. Those documents may be published on the

World Wide Web, CD-ROM, in printed form, and on mirror sites on the World Wide Web. Any other usage is prohibited without the express permission of the authors.